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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/884,421

06/20/2001

Un-jin Choi

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49455

7590

09/12/2005

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EXAMINER

CASTRO, ANGEL A

ART UNIT

PAPER NUMBER

2653

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/884,421	<b>Applicant(s)</b> CHOI ET AL.	
	<b>Examiner</b> Angel A. Castro	<b>Art Unit</b> 2653	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-49 is/are pending in the application.  
     4a) Of the above claim(s) 6-33,35-38,42 and 45 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 46-49 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,34,40,41,43 and 44 is/are rejected.
- 7) ☒ Claim(s) 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/8/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/23/05 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4-5, 34, 41, 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwaki.

Regarding claims 1, 34 and 44, Iwaki discloses a disk cartridge or housing (figures 4-11) comprising:

a case 12-13 housing an information recording and/or reproduction disk 1 and a shutter 24 which is installed on the case and selectively opened and closed to accomplish an access to the disk by a recording and/or reproduction apparatus, and

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a protrusion group 28 having a plurality of protrusions each protruding therefrom and toward the disk, the protrusion group being formed on an inner wall of at least one of the case and the shutter, and extending linearly radially in parallel from a rotational axis of the disk.

Regarding claim 2, Iwaki discloses that the protrusion group comprises a plurality of protrusions repeating at a predetermined interval in a predetermined pattern (see figure 5).

Regarding claim 4, Iwaki further shows that the protrusion group includes at least two protrusion groups each disposed at an equiangular interval in a direction of rotation of the disk (see figure 4).

Regarding claims 5, 41, Iwaki further discloses that the protrusion group includes protrusion groups arranged in a stepped manner in a radial direction of the disk (see figure 4, where protrusion groups 18, 22, 20 are stepped in a radial direction).

4. Claims 34 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Leonard et al.

Regarding claim 34, Leonard et al discloses a disk cartridge (figure 1) having an information recording and/or reproducing disk 4 comprising:

a case enclosing the disk; and

at least one protrusion group 12 having a plurality of protrusions each protruding therefrom and toward the disk, the protrusion group being formed within the case, and being positioned in parallel linearly in the radial direction of the disk (see figure 1).

Regarding claim 43, Leonard et al shows a foreign material filters 10 positioned within the case.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leonard et al in view of Morikawa (JP 04-159676).

Regarding claim 40, Leonard et al discloses the disk cartridge described above. Leonard et al does not disclose that the plurality of protrusions form a saw tooth shape configuration. Morikawa discloses a disk cartridge (figures 1-2) having a plurality of protrusions with a saw tooth shape configuration. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the disk cartridge of Leonard et al with the protrusions having a saw tooth shape configuration as taught by Morikawa.

The rationale is as follows: one of ordinary skill in the art would have been motivated to provide the disk cartridge of Leonard et al with the protrusions having a saw tooth shape configuration as taught by Morikawa as doing this would increase the cleaning of the disk.

***Allowable Subject Matter***

7. Claim 39 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. Claims 46-49 are allowed.

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***Response to Arguments***

9. Applicant's arguments with respect to claims 1-2, 4-5, 34, 39-41, 43-44 have been considered but are moot in view of the new ground(s) of rejection.


***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angel A. Castro whose telephone number is 571-272-7584. The examiner can normally be reached on Monday through Thursday, 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**ANGEL CASTRO**  
**PRIMARY EXAMINER**  
Angel Castro, Ph.D.